

Harper County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 20 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Harper County economy.¹

These 20 sectors have a total direct output of approximately **\$152.7 million** and support **746 jobs** in Harper County. Running the model for all 20 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Harper County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	746.1	19.14%	\$41,226,188	16.90%	\$152,689,223
Indirect Effect	119.5	3.06%	\$9,182,788	3.76%	\$19,072,988
Induced Effect	41.3	1.06%	\$2,556,040	1.05%	\$4,966,392
Total Effect	906.9	23.26%	\$52,965,016	21.71%	\$176,728,603

As shown in the above table, agriculture, food, and food processing sectors support **907 jobs**, or **23.26%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 20 agriculture, food, and food processing sectors is approximately **\$53.0 million**, or **21.71% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **380 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Harper County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	380.2	\$57,410,970
Support activities for agriculture and forestry	105.4	\$5,313,370
Grain farming	74.7	\$34,778,221
Landscape and horticultural services	36.5	\$1,145,951
Animal, except poultry, slaughtering	33.0	\$21,874,120
Farm machinery and equipment manufacturing	30.5	\$11,314,074
Truck transportation	28.8	\$4,969,281
Animal production, except cattle and poultry and eggs	25.9	\$3,896,374
Wholesale trade	17.8	\$3,243,638
Dairy cattle and milk production	14.0	\$6,124,931

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$57.4 million** to the Harper County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	380.2	\$57,410,970
Grain farming	74.7	\$34,778,221
Animal, except poultry, slaughtering	33.0	\$21,874,120
Farm machinery and equipment manufacturing	30.5	\$11,314,074
Dairy cattle and milk production	14.0	\$6,124,931
Support activities for agriculture and forestry	105.4	\$5,313,370
Truck transportation	28.8	\$4,969,281
Oilseed farming	3.5	\$4,670,914
Animal production, except cattle and poultry and eggs	25.9	\$3,896,374
Wholesale trade	17.8	\$3,243,638

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Harper County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.54	4,670,913.70
Grain farming	74.69	34,778,221.13
Vegetable and melon farming	0.07	14,870.88
Fruit farming	0.18	16,567.75
Tree nut farming	0.23	42,935.87
Greenhouse, nursery, and floriculture production	8.97	1,350,244.52
Cotton farming	6.96	1,758,572.46
All other crop farming	13.02	1,283,702.97
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	380.17	57,410,968.78
Dairy cattle and milk production	14.03	6,124,930.86
Poultry and egg production	0.27	241,429.08
Animal production, except cattle and poultry and eggs	25.95	3,896,374.23
Commercial hunting and trapping	0.63	12,351.65
Support activities for agriculture and forestry	105.37	5,313,370.23
Animal, except poultry, slaughtering	32.96	21,874,120.71
Bread and bakery product, except frozen, manufacturing	9.19	1,238,424.90
Frozen cakes and other pastries manufacturing	0.20	30,696.93
Farm machinery and equipment manufacturing	30.49	11,314,074.52
Veterinary services	2.68	170,500.22
Landscape and horticultural services	36.53	1,145,951.15

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Harper County, the retail sector was omitted.